Published by Blackwell Publishing
Editorial Offices:

Blackwell Publishing Ltd.
23 Ainslie Place, Edinburgh EH3 6AJ, UK

Blackwell Publishing Ltd.
108 Cowley Road, Oxford OX4 1JF, UK

Blackwell Publishing Ltd
Osney Mead, Oxford OX2 OEL, UK

Blackwell Publishing Asia
550 Swanston Street, Carlton South, Victoria 3053, Australia

Blackwell Verlag
Kurfürstendamm 57, D-10707 Berlin, Germany

Blackwell Publishing KK
Healthcare Division, NK Bldg. 3F, 2-8-12 Iwamotocho, Chiyodaku, Tokyo 101-0032, Japan

Blackwell Publishing Inc.
350 Main Street, Maldon MA02148, USA

Blackwell Munksgaard, 1, Rosenørns Allè, PO Box 227,
DK-1502, Copenhagen V, Denmark

© 2002 Blackwell Science Ltd.
All rights reserved. With the exception of fair dealing for the purposes of research or private study, or criticism or review, no part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing from the copyright holder. Authorization to photocopy items for internal and personal use is granted by the copyright holder for libraries and other users of the Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, USA (www.copyright.com), provided the appropriate fee is paid directly to the CCC. This consent does not extend to other kinds of copying, such as copying for general distribution for advertising or promotional purposes, for creating new collective works or for resale. Special requests should be addressed to the Editor: 0143-2885/01: $15.00.

The Blackwell Science logo is a trade mark of Blackwell Publishing Ltd.
registered at the United Kingdom Trade Marks Registry.

Typeset by Thomson Press (India) Ltd, Noida, India
Printed by Bell & Bain Ltd, Glasgow, UK

Number 1 January 2002

Original Articles

1 *A. Molander, P. Lundquist, P. N. Papapanou, G. Dahl'n & C. Reit:* A protocol for polymerase chain reaction detection of *Enterococcus faecalis* and *Enterococcus faecium* from the root canal

7 *G. M. Yared, F. E. Bou Dagher, P. Machtou & G. K. Kulkarni:* Influence of rotational speed, torque, and operator proficiency on failure of Greater Taper files

13 *L. B. Peters, A.-J. vanWinkelhoff, J. F. Buijs & P. R. Wesselink:* Effects of instrumentation, irrigation and dressing with calcium hydroxide on infection in pulpless teeth with periapical bone lesions

22 *C. I. Peters & O. A. Peters:* Occlusal loading of EBA and MTA root-end fillings in a computer-controlled masticator: a scanning electron microscopic study

30 *L. Awawdeh, F. T. Lundy, C. Shaw, P.-J. Lamey, G. J. Linden & J. G. Kennedy:* Quantitative analysis of substance P, neurokinin A and calcitonin gene-related peptide in pulp tissue from painful and healthy human teeth

37 *J. Versümer, M. Hülsmann & F. Schäfers:* A comparative study of root canal preparation using ProFile .04 and Lightspeed rotary Ni-Ti instruments

47 *C. A. Quinlan, D. M. Zisterer, K. F. Tipton & M. I. O'Sullivan: In vitro* cytotoxicity of a composite resin and compomer

56 *K. Gulabivala, A. Opasanon, Y.-L. Ng & A. Alavi:* Root and canal morphology of Thai mandibular molars

63 *P.V. Abbott:* Incidence of root fractures and methods used for post removal

Clinical Section

68 *T. Tsurumachi, M. Hayashi & O. Takeichi:* Non-surgical root canal treatment of *dens invaginatus* type 2 in a maxillary lateral incisor

73 *M. D. Öztan:* Endodontic treatment of teeth associated with a large periapical lesion

European Society of Endodontology

79 European Society of Endodontology Research Abstracts

120 Endodontic News and Calendar of Events

Number 2 February 2002

Review Article

127 *C. H. J. Hauman, N. P. Chandler & D. C. Tong:* Endodontic implications of the maxillary sinus: a review

Original Articles

142 *O. Molven, A. Halse & I. Fristad:* Long-term reliability and observer comparisons in the radiographic diagnosis of periapical disease

148 *E. Cotti, G. Campisi, V. Garau & G. Puddu:* A new technique for the study of periapical bone lesions: ultrasound real time imaging

153 *F.-M. Huang, K.-W. Tai, M.-Y. Chou & Y.-C. Chang:* Cytotoxicity of resin-, zinc oxide-eugenol, and calcium hydroxide-based root canal sealers on human periodontal ligament cells and permanent V79 cells

159 *S. Shibata, S. Yoneda, M. Yanagishita & Y. Yamashita:* Developmental changes and regional differences in histochemical localization of hyaluronan and versican in postnatal molar dental pulp

166 *R. Weiger, J. de Lucena, H. E. Decker & C. Löst:* Vitality status of microorganisms in infected human root dentine

172 *T. Castrisos & P.V. Abbott:* A survey of methods for post removal in specialist endodontic practice

181 *T. Ataoğlu, M. Üngör, B. Serpek, S. Haliloğlu, H. Ataoğlu & H. Ari:* Interlukin-1β and tumour necrosis factor-α levels in periapical exudates

186 *A. Y. Kaufman, S. Keila & M. Yoshpe:* Accuracy of a new apex locator: an *in vitro* study

193 *D. J. Caplan, J. Kolker, E. M. Rivera & R. E. Walton:* Relationship between number of proximal contacts and survival of root canal treated teeth

© 2002 Blackwell Science Ltd

Clinical Section

200 *R. J. G. De Moor:* C-shaped root canal configuration in maxillary first molars

209 *S. Aryanpour, P. Bercy & J.-P.Van Nieuwenhuysen:* Endodontic and periodontal treatments of a geminated mandibular first premolar

Letter to Editor

215 *E. H. Ehrmann:* Wanted: A standard for the recognition of rotary NiTi instruments

216 Endodontic News and Calendar of Events

Number 3 March 2002

Original Articles

221 *M. Evans, J. K. Davies, G. Sundqvist & D. Figdor:* Mechanisms involved in the resistance of *Enterococcus faecalis* to calcium hydroxide

229 *Y. Boucher, L. Matossian, F. Rilliard & P. Machtou:* Radiographic evaluation of the prevalence and technical quality of root canal treatment in a French subpopulation

239 *S. M. Ardeshna, A. J. E. Qualtrough & H.V.Worthington:* An *in vitro* comparison of pH changes in root dentine following canal dressing with calcium hydroxide points and a conventional calcium hydroxide paste

245 *D. Tziafas, O. Pantelidou, A. Alvanou, G. Belibasakis & S. Papadimitriou:* The dentinogenic effect of mineral trioxide aggregate (MTA) in short-term capping experiments

255 *G. Yoshikawa, Y. Murashima, R. Wadachi, N. Sawada & H. Suda:* Guided bone regeneration (GBR) using membranes and calcium sulphate after apicectomy: a comparative histomorphometrical study

264 *M.-K.Wu, D. Barkis, A. Roris & P. R.Wesselink:* Does the first file to bind correspond to the diameter of the canal in the apical region?

268 *G. J. Seal, Y.-L. Ng, D. Spratt, M. Bhatti & K. Gulabivala:* An *in vitro* comparison of the bactericidal efficacy of lethal photosensitization or sodium hyphochlorite irrigation on *Streptococcus intermedius* biofilms in root canals

275 *R. J. G. De Moor & G. M. G. Hommez:* The long-term sealing ability of an epoxy resin root canal sealer used with five gutta percha obturation techniques

283 *C. Dobó-Nagy, T. Serbán, J. Szabó, G. Nagy & M. Madléna:* A comparison of the shaping characteristics of two nickeltitanium endodontic hand instruments

Clinical Section

289 *M. L. Siers, W. L.Willemsen & K. Gulabivala:* Monitoring pulp vitality after transplantation of teeth with mature roots: a case report

295 *N. Özmeriç* Localised alveolar bone necrosis following the use of an arsenical paste: a case report

300 Meeting report: 10th Biennial Congress of the European Society of Endodontology

306 Endodontic News and Calendar of Events

309 Erratum

Number 4 April 2002

Original Articles

315 *E. V. Cruz, Y. Shigetani, K. Ishikawa, K. Kota, M. Iwaku & H. E. Goodis:* A laboratory study of coronal microleakage using four temporary restorative materials

321 *M. W. Egan, D. A. Spratt, Y.-L. Ng, J. M. Lam, D. R. Moles & K. Gulabivala:* Prevalence of yeasts in saliva and root canals of teeth associated with apical periodontitis

330 *E. V. Cruz, K. Kota, J. Huque, M. Iwaku & E. Hoshino:* Penetration of propylene glycol into dentine

337 *T. V. Castrisos, J. E. A. Palamara & P. V. Abbott:* Measurement of strain on tooth roots during post removal with the Eggler post remover

© 2002 Blackwell Science Ltd

345 *J. F. Siqueira Jr. I. N. Rôças, S. R. Moraes & K. R. N. Santos*: Direct amplification of rRNA gene sequences for identification of selected oral pathogens in root canal infections

352 *A. Lussi, B. Suter, A. Fritzsche, M. Gygax & P. Portmann*: *In vivo* performance of the new non-instrumentation technology (NIT) for root canal obturation

359 *T. Kvist & C. Reit*: The perceived benefit of endodontic retreatment

366 *B. R. Dorn, L. J. Harris, C. T. Wujick, F. J. Vertucci & A. Progulske-Fox*: Invasion of vascular cells *in vitro* by *Porphyromonas endodontalis*

372 *M. S. Hagge, R. D. M. Wong & J. S. Lindemuth*: Effect of three root canal sealers on the retentive strength of endodontic posts luted with a resin cement

379 *O. A. Peters & F. Barbakow*: Dynamic torque and apical forces of ProFile .04 rotary instruments during preparation of curved canals

Clinical Section

390 *Y. Nahmias & M. E. Rampado*: Root-canal treatment of a trifid crown premolar

395 *K. Patel, U. R. Darbar & K. Gulabivala*: External cervical resorption associated with localized gingival overgrowth

403 Endodontic News and Calendar of Events

Number 5 May 2002

Original Articles

407 *Y. Nakamura, L. Hammarström, K. Matsumoto & S. P. Lyngstadaas*: The induction of reparative dentine by enamel proteins

418 *D. M. Z. Guerisoli, M. A. Marchesan, A. D.Walmsley, P. J. Lumley & J. D. Pecora*: Evaluation of smear layer removal by EDTAC and sodium hypochlorite with ultrasonic agitation

422 *G. Gambarini & J. Laszkiewicz*: A scanning electron microscopic study of debris and smear layer remaining following use of GT rotary instruments

428 *I. Miletić, G. Prpić-Mehičić, T. Maršan, A. Tambič-Andrašević, S. Pleško, Z. Karlović & I. Anić*: Bacterial and fungal microleakage of AH26 and AH Plus root canal sealers

433 *H. Arı & M. Üngör*: *In vitro* comparison of different types of sodium perborate used for intracoronal bleaching of discoloured teeth

437 *L. G. Coldero, S. McHugh, D. MacKenzie & W. P. Saunders*: Reduction in intracanal bacteria during root canal preparation with and without apical enlargement

447 *J. Mente, J. Seidel, W. Buchalla & M. J. Koch*: Electronic determination of root canal length in primary teeth with and without root resorption

453 *P. Velvart*: Papilla base incision: a new approach to recession-free healing of the interdental papilla after endodontic surgery

461 *A. Brynjulfsen, I. Fristad, T. Grevstad & I. Hals-Kvinnsland*: Incompletely fractured teeth associated with diffuse longstanding orofacial pain: diagnosis and treatment outcome

467 *E. S. Pane, J. E. A. Palamara & H. H. Messer*: Stainless steel bands in endodontics: effects on cuspal flexure and fracture resistance

472 *H. Doornbusch, L. Broersma, G. Boering & P. R. Wesselink*: Radiographic evaluation of cases referred for surgical endodontics

478 *A. M. Alavi, A. Opasanon, Y.-L. Ng & K. Gulabivala*: Root and canal morphology of Thai maxillary molars

Clinical Section

486 *F. Maggiore, Y. T. Jou & S. Kim*: A six-canal maxillary first molar: case report

Meeting Report

492 Abstracts from the 2002 Spring Scientific Meeting of the British Endodontic Society

495 International Endodontic News and Calendar of Events

© 2002 Blackwell Science Ltd

Number 6 June 2002

Original Articles

499 *K. S. Al-Fouzan:* C-shaped root canals in mandibular second molars in a Saudi Arabian population

505 *E. Schäfer & D. Lohmann:* Efficiency of rotary nickel–titanium FlexMaster instruments compared with stainless steel hand K-Flexofile – Part 1. Shaping ability in simulated curved canals

514 *E. Schäfer & D. Lohman:* Efficiency of rotary nickel–titanium FlexMaster instruments compared with stainless steel hand K-Flexofile – Part 2. Cleaning effectiveness and instrumentation results in severely curved root canals of extracted teeth

522 *Z. Fuss, A. Mizrahi, S. Lin, O. Cherniak & E. I. Weiss:* A laboratory study of the effect of calcium hydroxide mixed with iodine or electrophoretically activated copper on bacterial viability in dentinal tubules

527 *M.-K. Wu, L. M. W. van der Sluis & P. R. Wesselink:* A preliminary study of the percentage of gutta-percha-filled area in the apical canal filled with vertically compacted warm gutta-percha

536 *G. M. Yared & G. K. Kulkarni:* Failure of ProFile Ni–Ti instruments used by an inexperienced operator under access limitations

542 *A. Lozano, L. Forner & C. Llena: In vitro* comparison of root-canal measurements with conventional and digital radiology

551 *R. Pulgar, J. J. Segura-Egea, M. F. Fernández, A. Serna & N. Olea:* The effect of AH 26 and AH Plus on MCF-7 breast cancer cell proliferation *in vitro*

Clinical Section

557 *H. Haueisen & D. Heidemann:* Hemisection for treatment of an advanced endodontic-periodontal lesion: a case report

573 ESE annual research grant: regulations for applications

574 International Endodontic Calender of Events

Number 7 July 2002

Review Article

575 *N. R. Stankiewicz & P. R. Wilson:* The ferrule effect: a literature review

Original Articles

582 *B. E. Mayer, O. A. Peters & F. Barbakow:* Effects of rotary instruments and ultrasonic irrigation on debris and smear layer scores: a scanning electron microscopic study

590 *F. Grimberg, G. Banegas, L. Chiacchio & O. Zmener: In vivo* determination of root canal length: a preliminary report using the Tri Auto ZX apex-locating handpiece

594 *C. Bellucci & N. Perrini:* A study on the thickness of radicular dentine and cementum in anterior and premolar teeth

607 *F. L. G. Calberson, C. A. J. G. Deroose, G. M. G. Hommez, H. Raes & R. J. G. De Moor:* Shaping ability of GT™ Rotary Files in simulated resin root canals

615 *K. Nicopoulou-Karayianni, U. Bragger, A. Patrikiou, A. Stassinakis & N. P. Lang:* Image processing for enhanced observer agreement in the evaluation of periapical bone changes

623 *S. K. Kim & Y. O. Kim:* Influence of calcium hydroxide intracanal medication on apical seal

629 *J. G. Meechan & J. I. M. Ledvinka:* Pulpal anaesthesia for mandibular central incisor teeth: a comparison of infiltration and intraligamentary injections

635 *S. I. Tobón, J. A. Arismendi, M. L. Marín, A. L. Mesa & J. A. Valencia:* Comparison between a conventional technique and two bone regeneration techniques in periradicular surgery

Case Report

642 *C. D. Lynch & F. M. Burke:* Incomplete tooth fracture following root canal treatment: a case report

647 International Endodontic News and Calendar of Events

650 Obituary

© 2002 Blackwell Science Ltd

Number 8 August 2002

Original Articles

651 *F. Barratto Filho, E. L. Ferreira & L. F. Fariniuk:* Efficiency of the 0.04 taper ProFile during the re-treatment of gutta-percha-filled root canals

655 *M. Dartar Öztan, A. A. Akman, L. Zaimoglu & S. Bilgiç:* Corrosion rates of stainless-steel files in different irrigating solutions

660 *L. B. Peters & P. R.Wesselink:* Periapical healing of endodontically treated teeth in one and two visits obturated in the presence or absence of detectable microorganisms

668 *M. Hülsmann, M. Heckendorff & F. Schäfers:* Comparative *in-vitro* evaluation of three chelator pastes

680 *G. M. G. Hommez, C. R. M. Coppens & R. J. G. De Moor:* Periapical health related to the quality of coronal restorations and root fillings

690 *L. Lupi-Pegurier, M.-F. Bertrand, M. Muller-Bolla, J. P. Rocca & M. Bolla:* Periapical status, prevalence and quality of endodontic treatment in an adult French population

698 *L. B. Peters, P. R.Wesselink & A. J. vanWinkelhoff:* Combinations of bacterial species in endodontic infections

703 *A. Halse, O. Molven & I. Fristad:* Diagnosing periapical lesions – disagreement and borderline cases

710 *F.V. Vier & J. A. P. Figueiredo:* Prevalence of different periapical lesions associated with human teeth and their correlation with the presence and extension of apical external root resorption

Case Report

720 *S. Zinelis & J. Margelos: In vivo* fracture of a new rubber-dam clamp

724 International Endodontic News and Calendar of Events

Number 9 September 2002

Original Articles

729 *A. A. Zaia, R. Nakagawa, I. De Quadros, B. P. F. A. Gomes, C. C. R. Ferraz, F. B. Teixeira & F. J. Souza-Filho:* An *in vitro* evaluation of four materials as barriers to coronal microleakage in root-filled teeth

735 *M. Tanomaru Filho, M. R. Leonardo, L. A. B. Silva, F. F. Anibal & L. H. Faccioli:* Inflammatory response to different endodontic irrigating solutions

740 *M.Venturi, G. Pasquantonio, M. Falconi & L. Breschi:* Temperature change within gutta-percha induced by the System-B Heat Source

747 *A. Halse & O. Molven:* Idiopathic osteosclerosis of the jaws followed through a period of 20–27 years

752 *B. T. Tan & H. H. Messer:* The effect of instrument type and preflaring on apical file size determination

759 *G. Slaus & P. Bottenberg:* A survey of endodontic practice amongst Flemish dentists

768 *Y. Murashima, G. Yoshikawa, R.Wadachi, N. Sawada & H. Suda:* Calcium sulphate as a bone substitute for various osseous defects in conjunction with apicectomy

775 *M. Rafter, M. Baker, M. Alves, J. Daniel & N. Remeikis:* Evaluation of healing with use of an internal matrix to repair furcation perforations

784 *O. Molven, A. Halse, I. Fristad & D. MacDonald-Jankowski:* Periapical changes following root-canal treatment observed 20–27 years postoperatively

791 *N. Vivacqua-Gomes, C. C. R. Ferraz, B. P. F. A. Gomes, A. A. Zaia, F. B. Teixeira & F. J. Souza-Filho:* Influence of irrigants on the coronal microleakage of laterally condensed gutta-percha root fillings

Case Report

796 *F. Baratto-Filho, L. F. Fariniuk, E. L. Ferreira, J. D. Pecora, A. M. Cruz-Filho & M. D. Sousa-Neto:* Clinical and macroscopic study of maxillary molars with two palatal roots

802 International Endodontic News and Calendar of Events

© 2002 Blackwell Science Ltd

Number 10 October 2002

Original Articles

807 *H.-X. Lu, M.-Z. Xiao, Z.-Y. Niu, X.-M. Guo, S.-L. Zhao, H.-G. Wang & H.-Y. Guo:* Effect of IL-1ra on human dental pulp cells and pulpal inflammation

812 *D. A. Stewardson & E. S. McHugh:* Patients' attitudes to rubber dam

820 *L. Bergmans, J. Van Cleynenbreugel, M. Beullens, M. Wevers, B. Van Meerbeek & P. Lambrechts:* Smooth flexible versus active tapered shaft design using NiTi rotary instruments

829 *P. L. Michaelson & G. R. Holland:* Is pulpitis painful?

833 *K. Kijsamanmith, S. Timpawat, C. Harnirattisai & H. H. Messer:* Micro-tensile bond strengths of bonding agents to pulpal floor dentine

840 *J. D. Regan, J. L. Gutmann & D. E. Witherspoon:* Comparison of Diaket and MTA when used as root-end filling materials to support regeneration of the periradicular tissues

848 *R. C. Martins, M. G. A. Bahia & V. T. L. Buono:* Surface analysis of ProFile instruments by scanning electron microscopy and X-ray energy-dispersive spectroscopy: a preliminary study

854 *C.-H. Tsai, F.-M. Huang, L.-C. Yang, M.-Y. Chou & Y.-C. Chang:* Immunohistochemical localization of cyclo-oxygenase-2 in radicular cysts

859 *I. M. Saleh, I. E. Ruyter, M. Haapasalo & D. Ørstavik:* The effects of dentine pretreatment on the adhesion of root-canal sealers

867 *E. Schäfer:* Effect of sterilization on the cutting efficiency of PVD-coated nickel–titanium endodontic instruments

Case Report

873 *A. Gonçalves, M. Gonçalves, D. P. Oliveira & N. Gonçalves: Dens invaginatus* type III: report of a case and 10-year radiographic follow-up

880 International Endodontic News and Calendar of Events

Number 11 November 2002

Review Article

885 *J. G. Meechan:* Supplementary routes to local anaesthesia

Original Articles

897 *J. Wahlgren, T. Salo, O. Teronen, H. Luoto, T. Sorsa & L. Tjäderhane:* Matrix metalloproteinase-8 (MMP-8) in pulpal and periapical inflammation and periapical root-canal exudates

905 *F.-M. Huang & Y.-C. Chang:* Cytotoxicity of dentine-bonding agents on human pulp cells *in vitro*

910 *A. A. Hamasha, T. Al-Khateeb & A. Darwazeh:* Prevalence of dilaceration in Jordanian adults

913 *A. Al-Wahadni & D. L. Gutteridge:* An *in vitro* investigation into the effects of retained coronal dentine on the strength of a tooth restored with a cemented post and partial core restoration

919 *T. Rödig, M. Hülsmann, M. Mühge & F. Schäfers:* Quality of preparation of oval distal root canals in mandibular molars using nickel-titanium instruments

929 *T. Attin, W. Buchalla, C. Zirkel & A. Lussi:* Clinical evaluation of the cleansing properties of the noninstrumental technique for cleaning root canals

934 *W. Niu, T. Yoshioka, C. Kobayashi & H. Suda:* A scanning electron microscopic study of dentinal erosion by final irrigation with EDTA and NaOCl solutions

Clinical Section

940 *A. C. Tinaz, T. Alaçam & Ö. Topuz:* A simple model to demonstrate the electronic apex locator

946 *R. J. G. De Moor & A. M. J. C. DeWitte:* Periapical lesions accidentally filled with calcium hydroxide

959 International Endodontic News and Calendar of Events

© 2002 Blackwell Science Ltd

Number 12 December 2002

963 Editorial

Review Article

964 *H. J. Naoum & N. P. Chandler:* Temporization for endodontics

Original Article

979 *F. Kont Çobankara, N. Adanir, S. Belli & D. H. Pashley:* A quantitative evaluation of apical leakage of four root-canal sealers

985 *T. Lambrianidis, A. Kapalas & M. Mazinis:* Effect of calcium hydroxide as a supplementary barrier in the radicular penetration of hydrogen peroxide during intracoronal bleaching *in vitro*

991 *M. Siragusa & D. J. McDonnell:* Indirect digital images: limit of image compression for diagnosis in endodontics

996 *Y. Kitasako, S. Shibata, C. F. Cox & J. Tagami:* Location, arrangement and possible function of interodontoblastic collagen fibres in association with calcium hydroxide-induced hard tissue bridges

1005 *D. Da Silva, U. Endal, A. Reynaud, I. Portenier, D. Ørstavik & M. Haapasalo:* A comparative study of lateral condensation, heat-softened gutta-percha, and a modified master cone heat-softened backfilling technique

Case Report

1012 *I. Fristad, A. Bårdsen, G. C. Knudsen & O. Molven:* Prodromal herpes zoster – a diagnostic challenge in endodontics

1017 International Endodontic News and Calendar of Events

© 2002 Blackwell Science Ltd